

MARKET ANALYSIS

There are four components to Market Analysis:

1) Identification of Sources

The first step in the process is to identify potential sources for the product. These potential sources will then be asked to participate in a market survey and provide information about and possibly demonstrations of their products. A list of potential sources can be developed from industry lists. Sources of vendor lists include: Internet Search Engines (Yahoo, Alta Vista, Lycos, etc) and the PDM Information Center.

2) Survey of Vendors

The survey of vendors can be as simple as a few telephone calls or it may be a comprehensive questionnaire sent to the whole group of potential vendors. The following types of information should be collected:

- *General performance specifications* - these are placed at the beginning of the survey and are derived from the product system specification. They allow the vendor to quickly determine whether any of their products meet the Government's requirements.
- *Supplier capability* - these questions determine the length of time the vendor has been in business and whether they have the capability to meet the expected demand.
- *Market acceptability criteria* - these questions determine how long the vendor has produced the product, the quantities of product sales, and available catalog information.
- *Supportability issues* - this section of questions will identify vendor repair, service, and warranty policies. Spare parts availability, delivery times, on-site and telephonic technical assistance availability, and handling of product improvements or discontinued models should all be investigated. The vendors ability to make customary modifications and their customary commercial terms and conditions should be specified.
- *Available test data* - Test data (if available) from either the vendor's own laboratory or private laboratories should be provided. The test data should relate to the performance specification criteria specified earlier in the survey.
- *Product Cost* - This section of questions should determine not only per unit costs but also whether cost breaks are available for large quantities. Rental or lease options should also be explored here.
- *References* - Vendors should provide lists of other customers currently using the product. Names and phone numbers of POC's should be provided.

* - NOTE: OMB rules specify that a survey going to more than nine suppliers must be first coordinated with OMB for compliance with the Paperwork Reduction Act of 1980. If sent to fewer than nine suppliers the cover letter must state that OMB regulations do not apply.

3) Checking of References

Depending on funding availability and time schedules checking of references may be accomplished via telephone calls or it may require on-site visits. In either case, both system users and system maintainers should be interviewed.

4) Product Evaluation

The fourth and final step is product evaluation. In this step all or some of the products are tested in real operational situations. A Test Plan should be developed and used for this phase. Test results should be documented.

The following matrix is a sample format for documenting market analysis data related to performance requirements. In the example, the salient characteristics are listed in the left hand column and the potential suppliers identified and products examined are listed across the top of the table. Note that the term “performance requirements” includes issues such as: product warranty, delivery schedules, and maintenance service requirements. Product costs should also be shown on the matrix. Organizing the data in this way aids in addressing the following questions:

- Are there existing items that appear to meet or come close to meeting the performance requirements?
- Are any of the desired performance characteristics unrealistic?
- Which characteristics are candidates for trade-off analysis?
- Could any characteristics be more stringent?
- Would meeting performance requirements require minor modifications of existing items.

CANDIDATES

PERFORMANCE CHARACTERISTICS	<u>Company 1</u>	<u>Company 2</u>	<u>Company 3</u>	<u>Company 4</u>
Battery power	•	•	•	•
Waypoints	X	•	•	•
Accuracy <100m	30	51	100	17
Latitude/Longitude	•	•	•	•
UTM	•	•	•	•
25 m/sec	?	•	•	•
Weight <10lbs	5	10	9.5	29

Legend:

- = Meets requirement
- X = Does not meet requirement
- ? = Information not provided

Schedule of Events

The following order of events should be followed:

- 1) Identification of sources - can begin immediately.
- 2) Development of Survey Form - can begin immediately, but cannot be completed until most of the System Specification has been completed since those performance requirements should be included in the survey.
- 3) Send Survey to Vendors - specify a specific time period for their completion and return of the survey. The System Specification and Test Plan should be completed by this time.
- 4) Collect surveys.

5) Contact vendor references

6) Tabulate survey results. - prepare a comparison matrix as shown above. Based on the results of this analysis, downselect a few systems for testing.

7) Test most promising candidate systems against the Test Plan criteria.

8) Tabulate test results.

9) Perform cost/performance trade-off determination.

10) Select Best Value system(s)